

Repository Index

Subject Index	Finger Index	Minutia Index
---------------	--------------	---------------

Figure 1

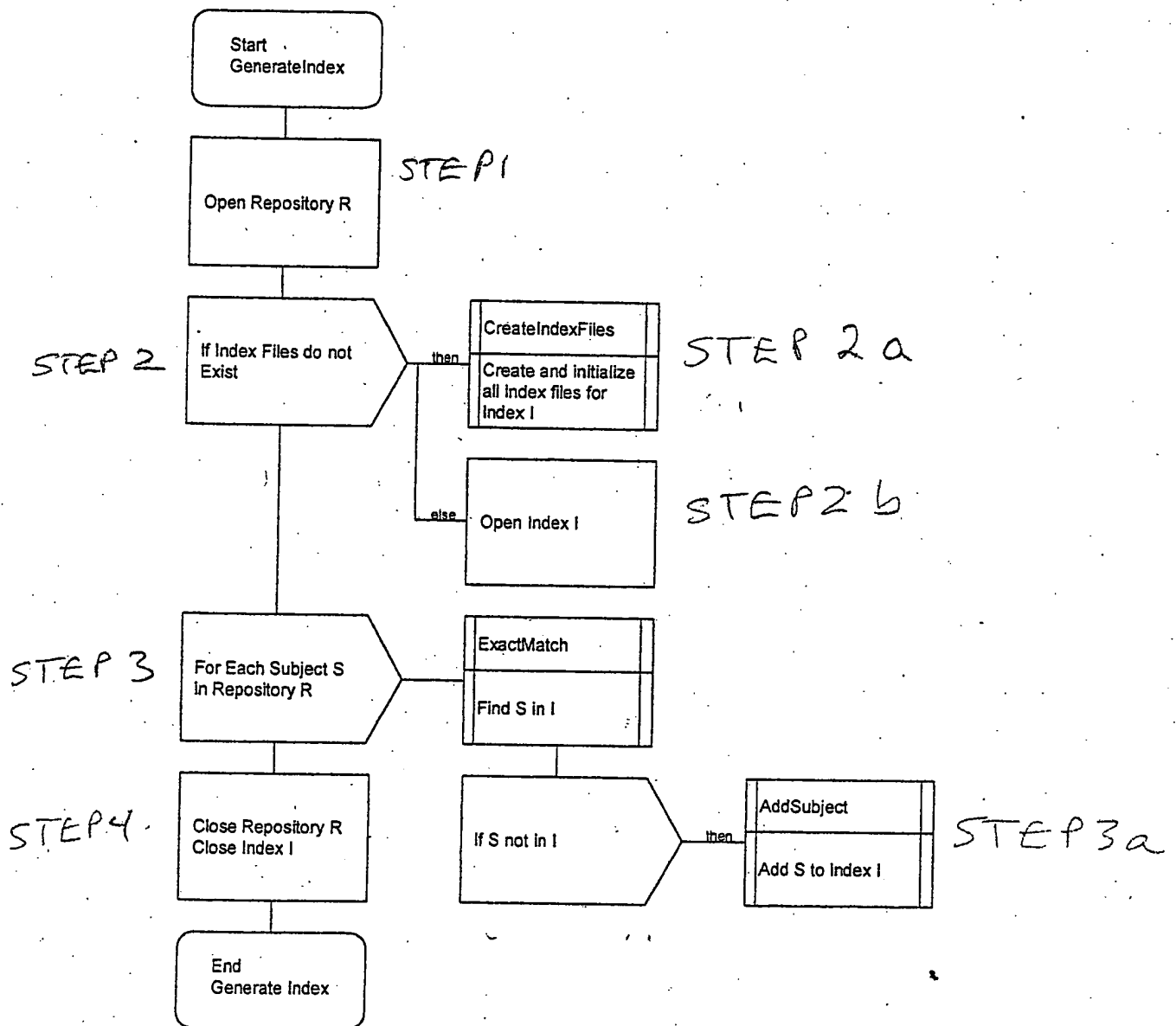


Figure 2

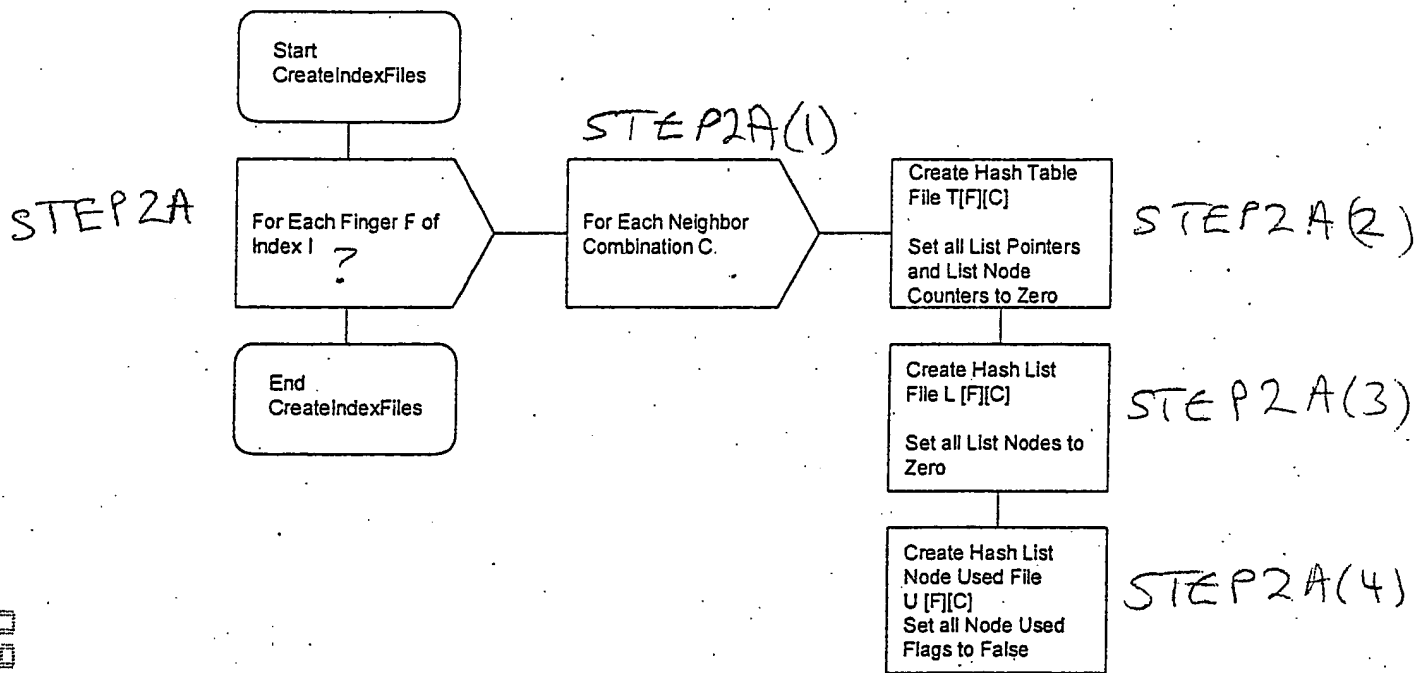


Figure 3

Hash List Node

Hash Code
Node Count
Repository Index[0]
Repository Index[1]
Repository Index[2]
Repository Index[3]
.
Repository Index[26]
Repository Index[27]
Repository Index[28]
Repository Index[29]

Figure 4

2025 RELEASE UNDER E.O. 14176

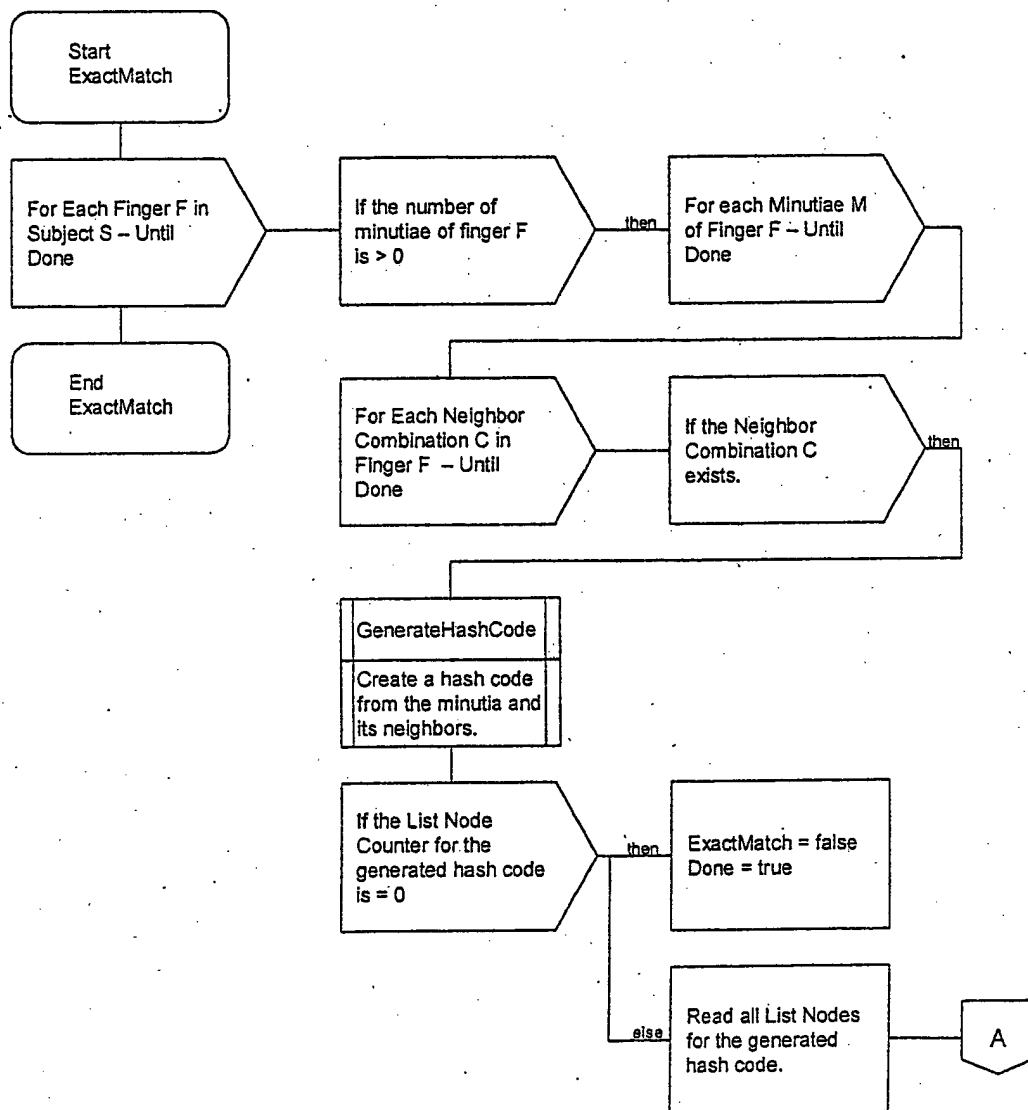


Figure 5. ExactMatch Flow Diagram

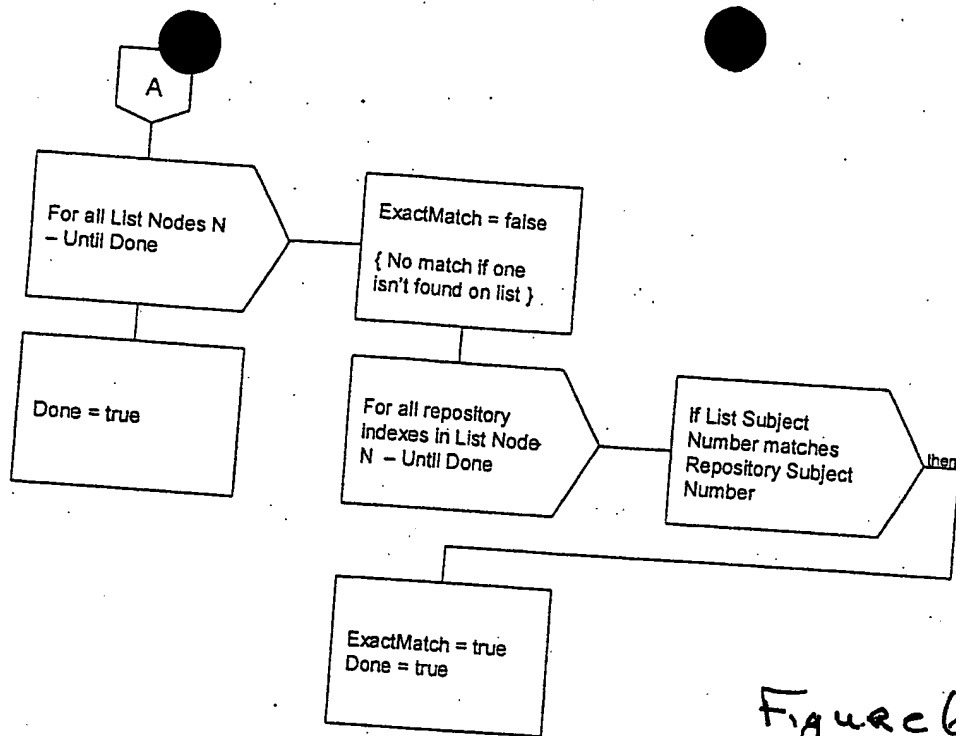


Figure 6

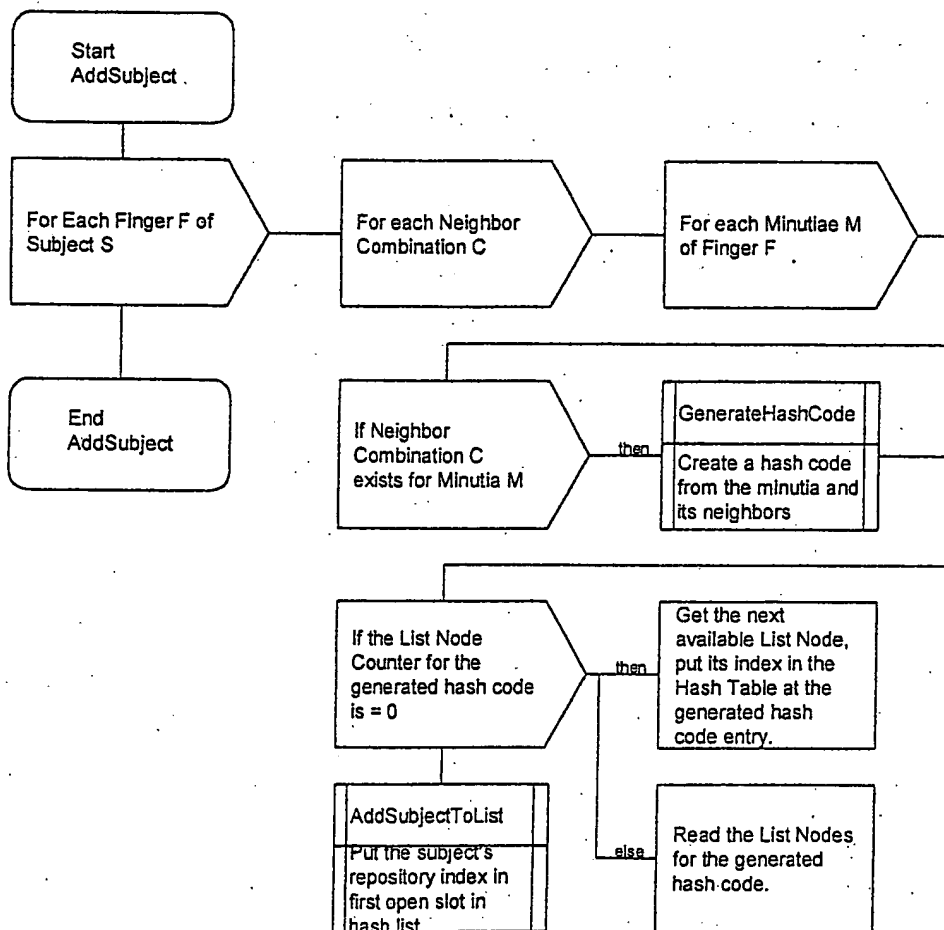


Figure 7

```

graph TD
    Start([Start  
GenerateHashCode]) --> QuantizeBase[Quantize Base  
Angle using Base  
Angle Quantization  
Vector]
    QuantizeBase --> QuantizeNeighborAB[Quantize Neighbor A  
and B Euclidean  
Distance using  
Neighbor Distance  
Quantization Vector]
    QuantizeNeighborAB --> QuantizeNeighborABRel[Quantize Neighbor A  
and B Relative Angle  
using Relative Angle  
Quantization Vector]
    QuantizeNeighborABRel --> HistogramEqualizeRidge[Histogram Equalize  
Neighbor A and B  
Ridge Counts using  
Ridge Count  
Equalization Vector]
    HistogramEqualizeRidge --> End([End  
GenerateHashCode])
    
    HistogramEqualizeNeighborAB[Histogram Equalize  
Neighbor A and B  
Euclidean Distance  
using Neighbor  
Distance  
Equalization Vector] --> HistogramEqualizeNeighborABRel[Histogram Equalize  
Neighbor A and B  
Relative Angles  
using Relative Angle  
Equalization Matrix]
    HistogramEqualizeNeighborABRel --> GenerateHashCode[GenerateHashCode  
= A0 + R0(A1 +  
R1(A2 + R2(A3 +  
R3(A4 + R4(A5)))))]
    GenerateHashCode --> End
  
```

Figure 8

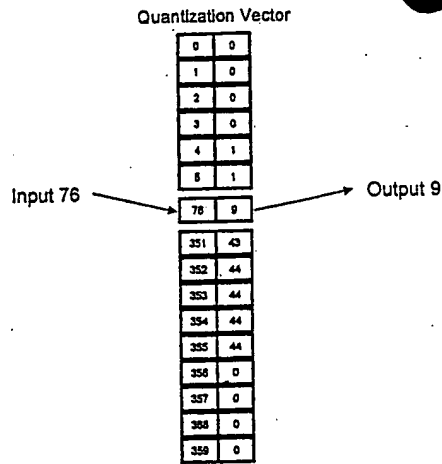


Figure 9.

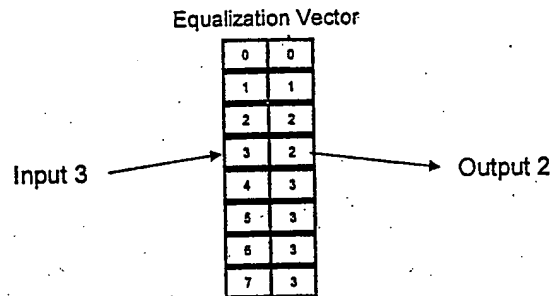


Figure 10/

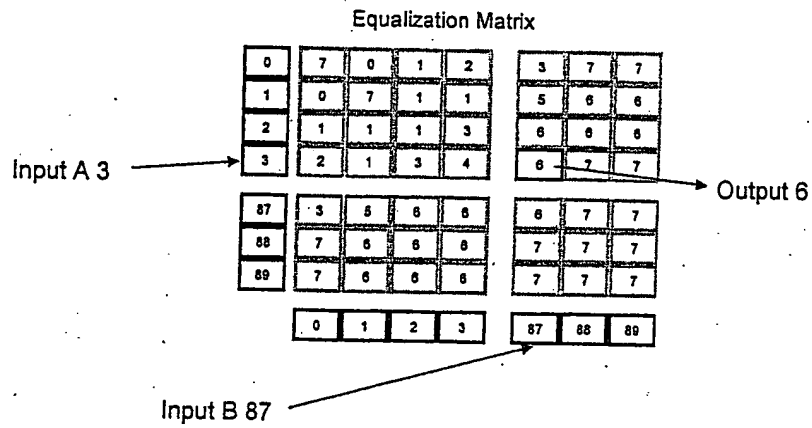


Figure 11

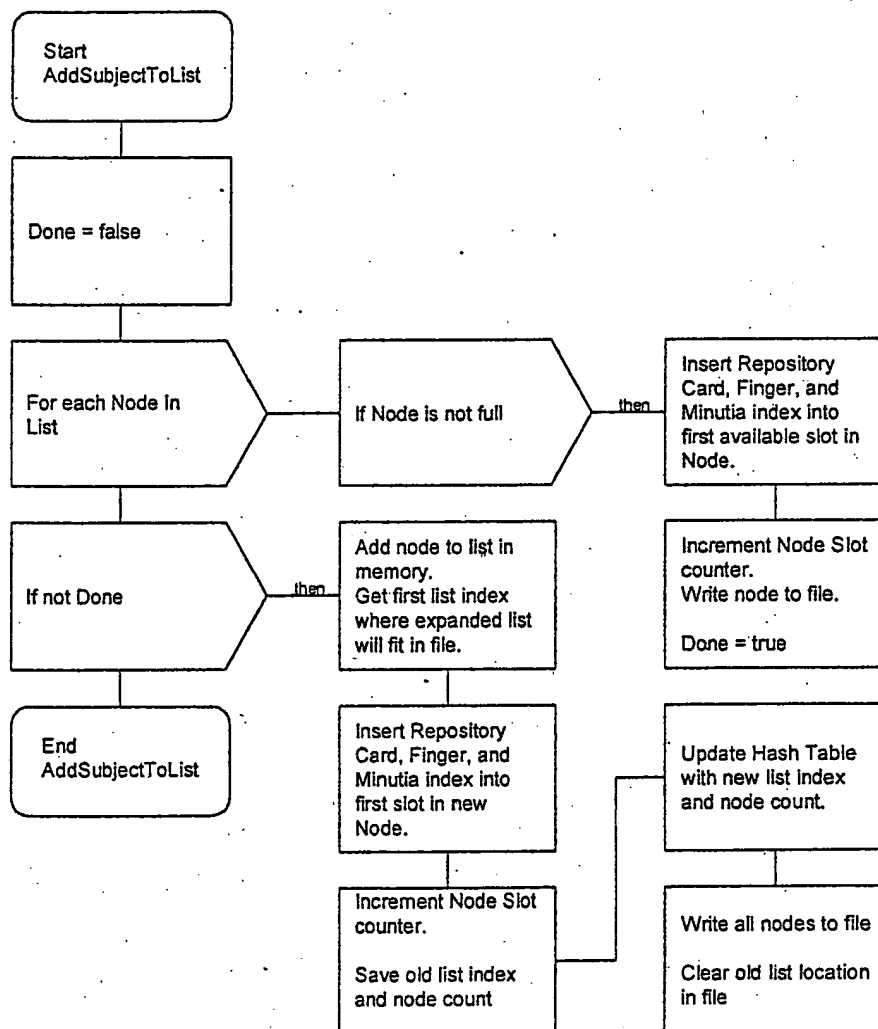


Figure 12.

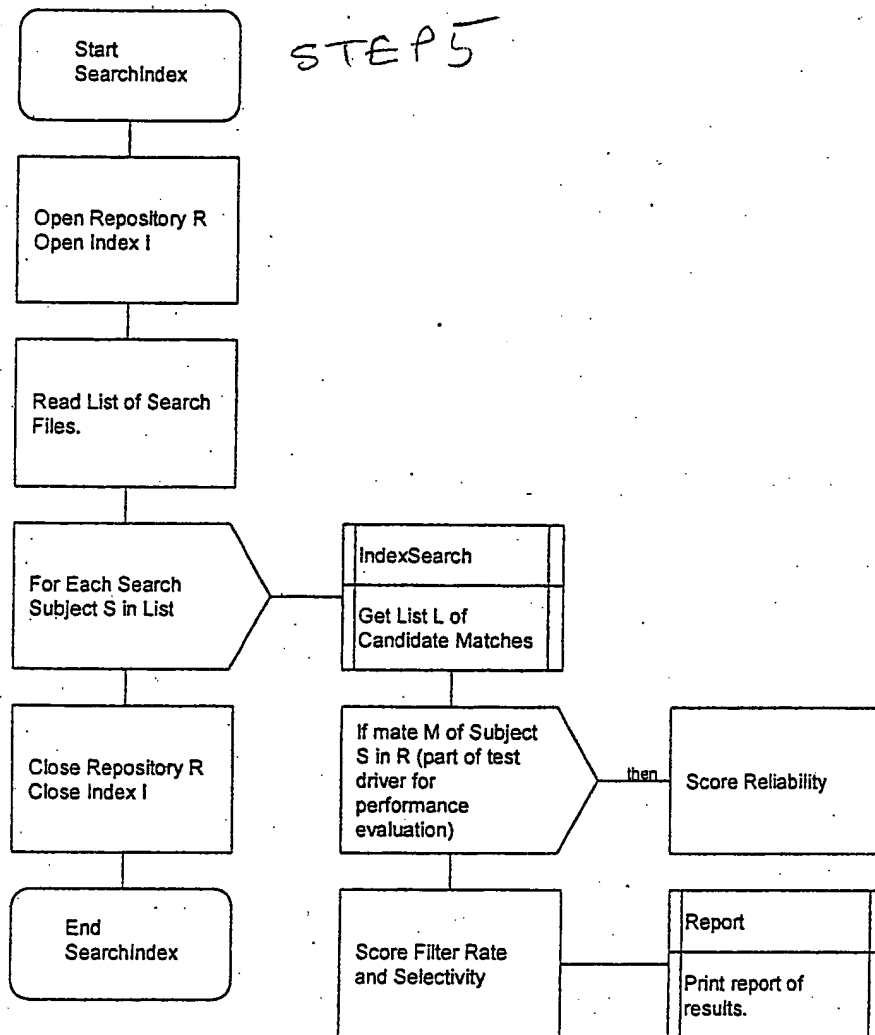


Figure 13

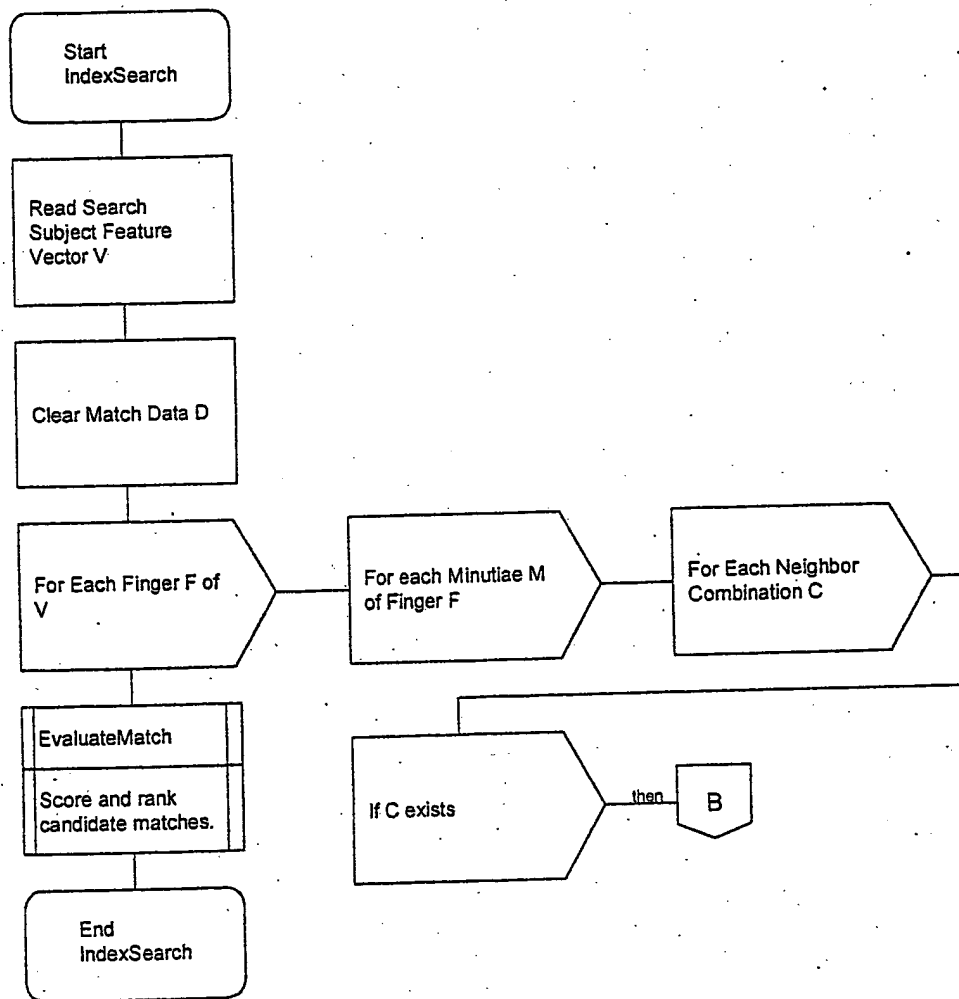


Figure 14

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

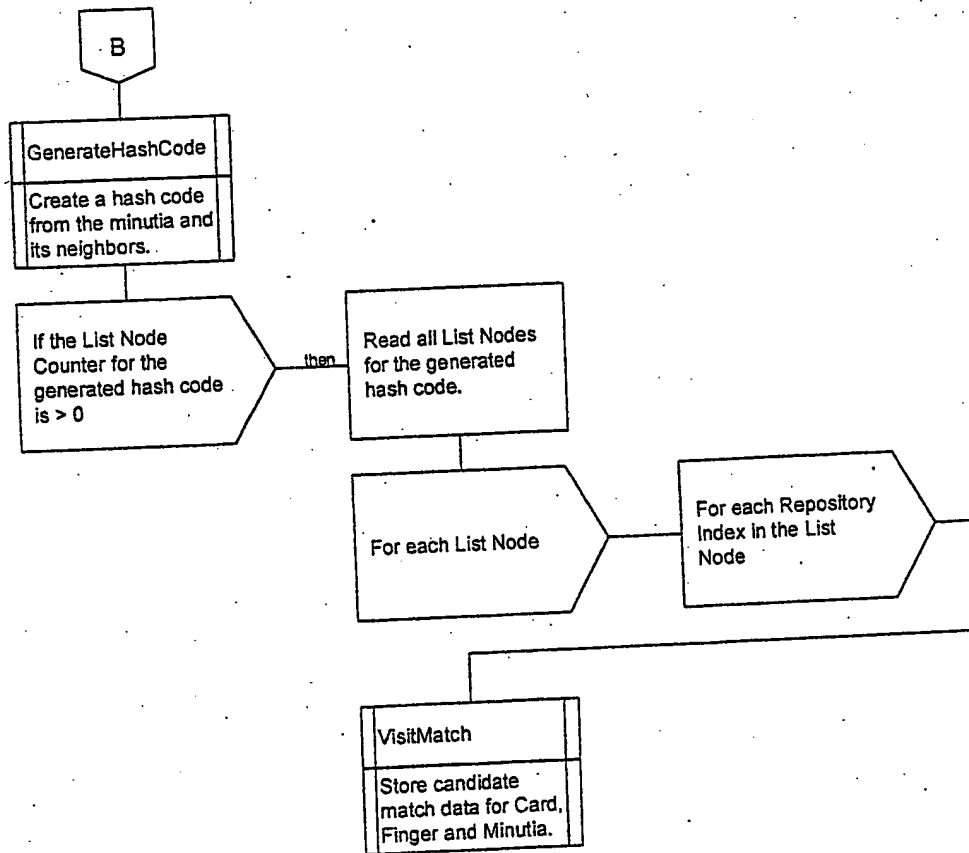


Figure 15

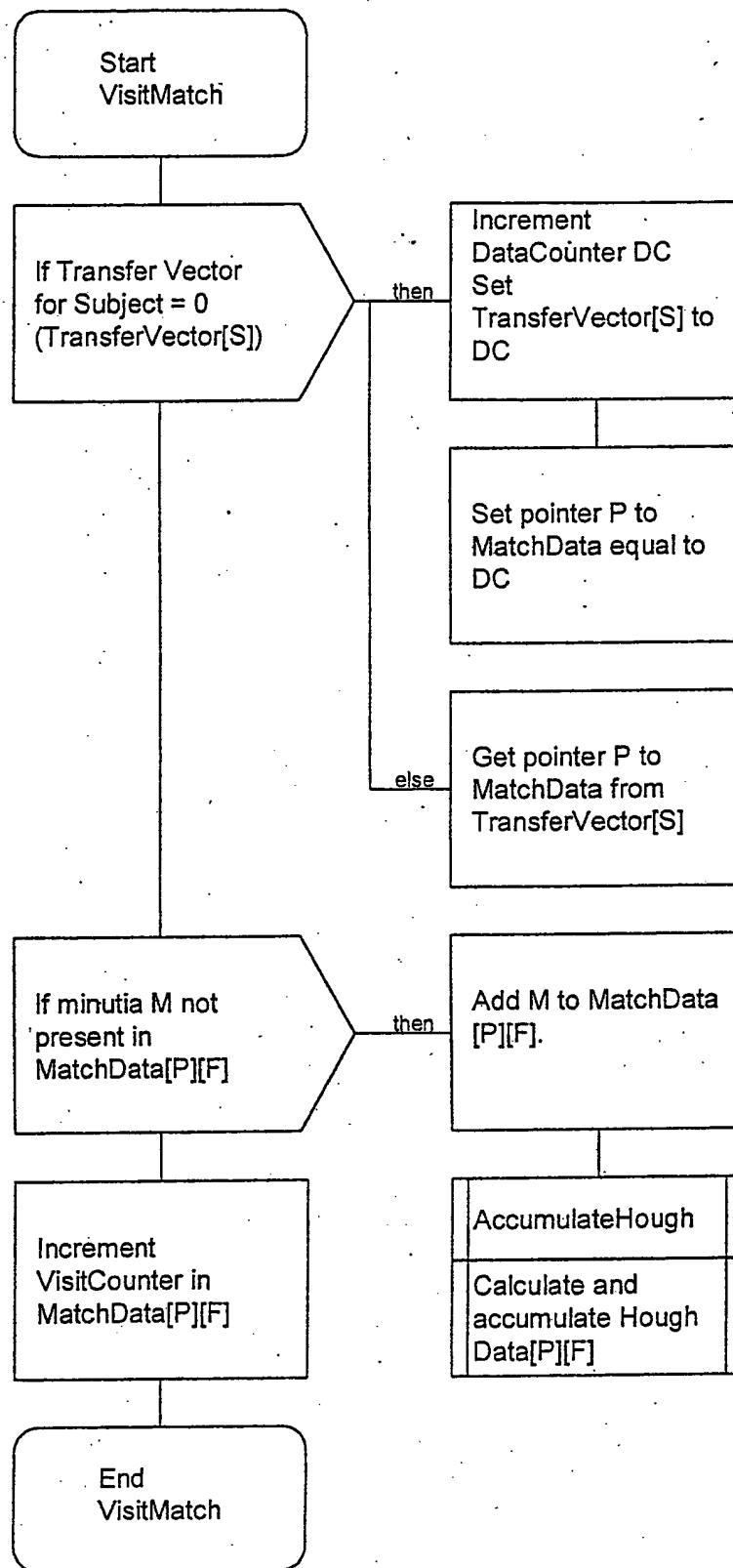


Figure 16. VisitMatch Subprogram Flow Diagram.

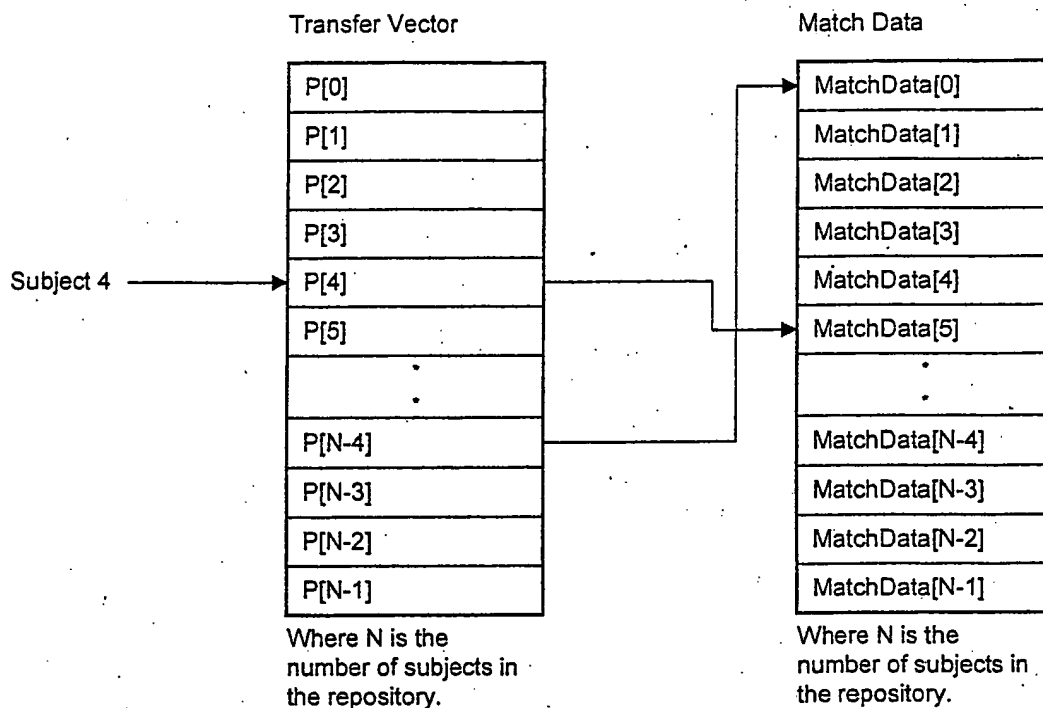


Figure 17. Transfer Vector Data.

Match Data

VisitCount
MinutiaBitMap[0]
MinutiaBitMap[1]
MinutiaBitMap[2]
MinutiaBitMap[3]
HoughAcc[0][0]
⋮
⋮
HoughAcc[7][7]
Score

Figure 18.

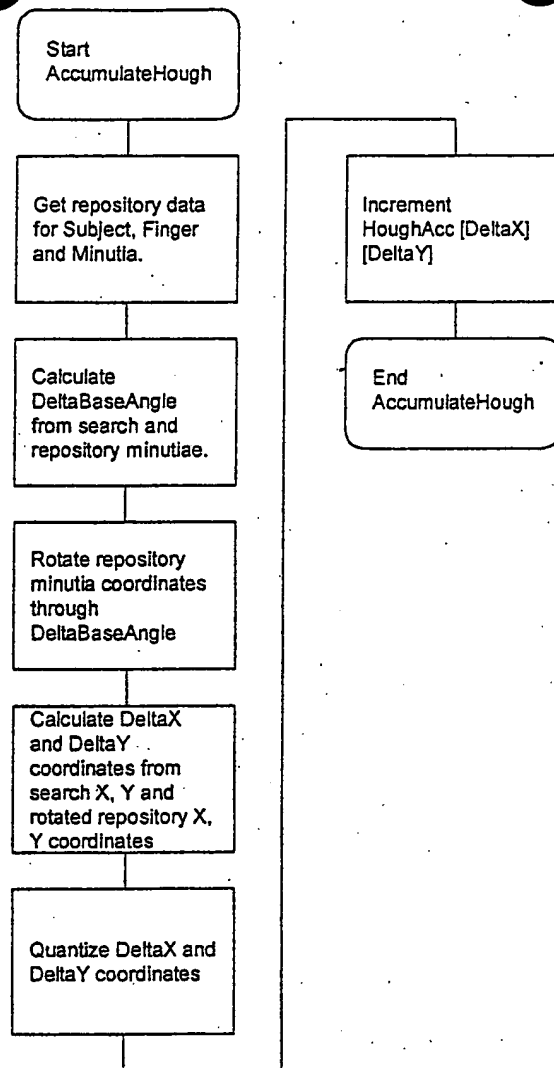


Figure 19

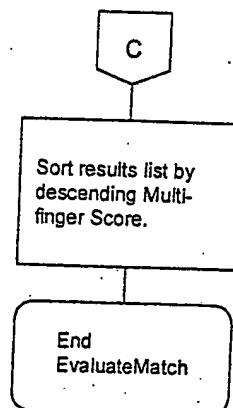


Figure 21

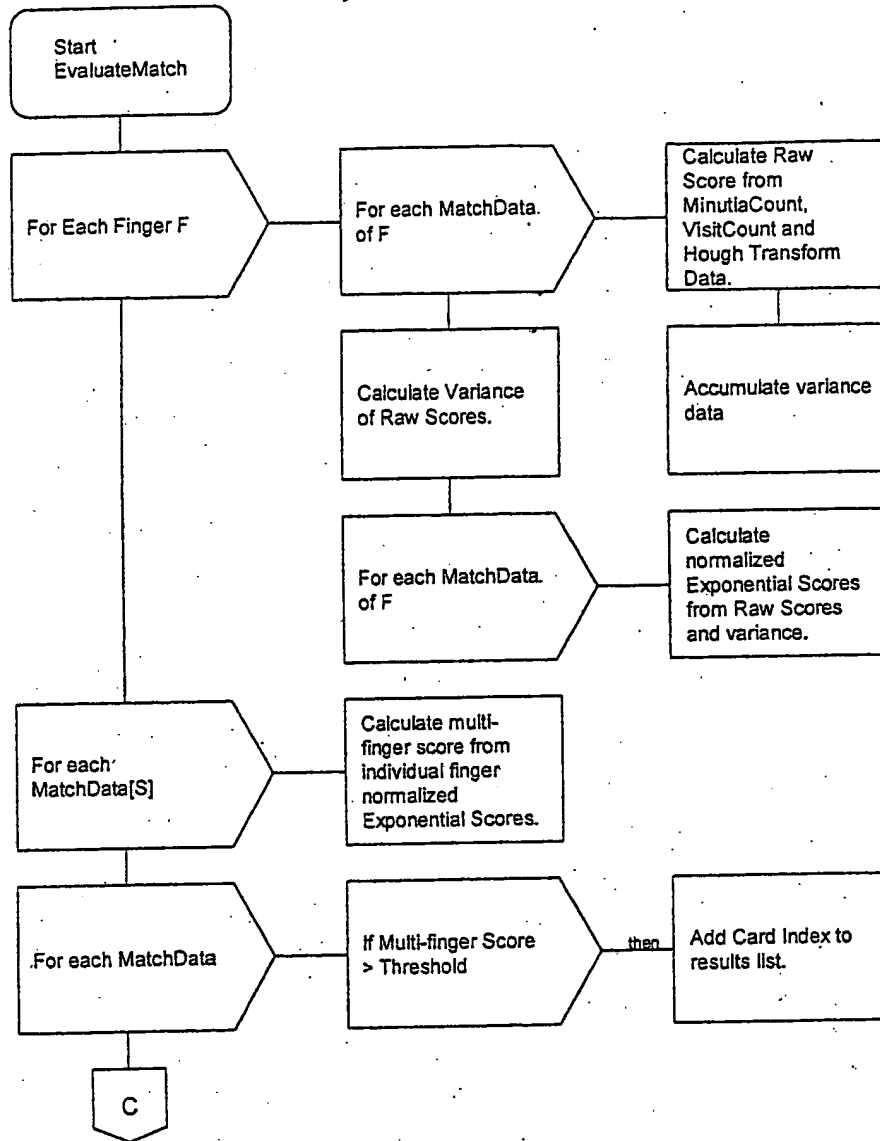


Figure 20. EvaluateMatch Subprogram Flow Diagram.